



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460**

**OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES**

Memorandum

From: Michael Patterson, Ph. D. /s/ 4-1-04
Environmental Field Branch
Field and External Affairs Division

To: Arthur-Jean Williams, Chief
Environmental Field Branch
Field and External Affairs Division

Subject: Effects Determination for Naled for Pacific Anadromous Salmonids

We reviewed data and other information for Naled, an organophosphate pesticide named by the Washington Toxics Coalition (WTC) and included in the court order for 'effects determinations' and potential consultation with the National Marine Fisheries Service. Naled was first registered in 1959 for use as an insecticide-acaricide. It is used primarily to control adult mosquitos, but it is also used to control leaf-eating insects on a variety of fruits, nuts, vegetables and field crops as cucurbit vegetables, citrus, brassica and leafy vegetables, cotton, alfalfa, safflower, sugar beets, soybeans, peaches, grapes, strawberries, and dried and succulent beans and peas. The Environmental Fate and Effects Division (EFED) has completed an environmental risk assessment for a Reregistration Eligibility Decision (RED) to be issued in January of 2002. The assessment concludes that levels of concern are exceeded for endangered freshwater fish and populations of aquatic invertebrates exposed to runoff and drift from agricultural treatment sites. We have adapted the more general findings of the EFED assessment to develop an analysis of the potential for effects on endangered and threatened Pacific salmon and steelhead Evolutionary Significant Units (ESUs) from current uses in California and the Pacific Northwest.

Based on the environmental risk assessment and additional considerations indicated in our analysis and other attached or referenced materials, we conclude that the use of Naled may affect ten salmon and steelhead ESUs, may affect but is not likely to adversely affect ten ESUs, and will have no effect on six ESUs. Our determinations are based on the known or potential use of Naled on crops within habitats and migration corridors of each ESU, the acute risk of Naled to endangered fish, and the potential for indirect effects due to acute and chronic risks to their aquatic-invertebrate food supply. We don't have county-level usage data for homeowner and most noncrop uses, but we presume that they may contribute to the exposure and risks of these ESUs.

attachments